

Iowa Governor's STEM Advisory Council Guidelines for

STEM BEST® Businesses Engaging Students and Teachers

What makes a quality STEM BEST® proposal?

The heart of the STEM BEST® model is the relationship to business or industry partner(s) who with educators define curriculum and work space. Topics and projects are driven by the needs of employer partner(s) in collaboration with educators. Learning spaces are separate and distinct from the standard school environment—ideally at the employers' site.

- A plan for the development of a rigorous and relevant STEM curriculum
- Organized, diverse partnership demonstrating a sustained commitment to the program through various levels of engagement
- A plan for professional development, utilizing business professionals and educational institutions
- A description of alignment to district STEM goals
- A sensible financial model with a significant cost-share commitment
- A plan to sustain the model
- A plan for collection of evidence of effectiveness and areas of continued growth

Four Key Attributes of the STEM BEST® Model

1. Education Driven by Employer (business or industry) knowledge and practice

- Real-world industry-led and/or student-led projects that connect students to industry knowledge base
- Quality work-based learning experiences driven by local need
- Regional schools, districts, or district clusters collaborate with business and industry to maximize opportunities for students in a cost-effective model

2. Rigorous, Relevant and Dynamic STEM Curriculum

- Instructional strategies foster creativity, innovation, and an "entrepreneurial mindset" through a collaborative, interdisciplinary, and problem-based approach
- Driven by 21st century skills needed in current and future workforce
- Accounts for all learners, especially underrepresented populations
- Mastery of state academic standards demonstrated through a competency based approach

3. Authentic Partnerships

- Community businesses and organizations (e.g., nonprofits, informal education venues)
- Educational institutions (clusters of schools and/or districts are encouraged)
- Partner commitment narratives are detailed and consistent with the application narrative.

4. Connection to post-secondary education and/or training

- Expertise at the post-secondary education and training level involved
- K-12 activities align to post-secondary education and training programs

In the completion of the BEST® application, please consider carefully the need to include the following types of detailed information:

Student Targets

- a) Profile participating students' ages, gender, race, ethnicity, disabilities.
- b) Transferable skills gained
- c) Attendance
- d) Employer-partner feedback regarding student(s)
- e) Academic achievement

Operational Targets

- a) Enrollment numbers
- b) Number of mentors and business partners
- c) Curriculum products
- d) Budget management

School system impact targets

- a) Instructional changes made
- b) Transferable skills gained by educators
- c) Curriculum changes made
- d) Assessments created or adapted

Customer Satisfaction Targets

- a) Students feedback
- b) Parent feedback
- c) Business Partner/Mentor feedback
- d) Teacher feedback
- e) Administrator and Counselor feedback
- f) Other stakeholder and partner feedback